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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
.10/0]0:169	11/13/2001	. Richard L. Segar	169.12-0502	7782	
1.64 7.5	164 7590 04/07/2004			EXAMINER	
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			MILLER, BRIAN E .		
			ART UNIT	PAPER NUMBER	
			2652	<i>-</i>	
. *			DATE MAILED: 04/07/2004	' /	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/010,169	SEGAR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian E. Miller	2652				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sneet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a r  - If NO period for reply is specified above, the maximum statutory perion  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be tin eply within the statutory minimum of thirty (30) day od will apply and will expire SIX (6) MONTHS from ute, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 13	January 2004.					
2a)☐ This action is <b>FINAL</b> . 2b)☑ TI	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application	Claim(s) <u>1-22</u> is/are pending in the application.					
	4a) Of the above claim(s) 6 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
<u> </u>	6) Claim(s) 1,2,4,5,7-16 and 18-22 is/are rejected.					
· <u> </u>	☑ Claim(s) <u>3 and 17</u> is/are objected to. ☑ Claim(s) <u>1-22</u> are subject to restriction and/or election requirement.					
	or orconorrequirement.					
Application Papers						
9) The specification is objected to by the Exami						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
·						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a lie	ents have been received. ents have been received in Applicationity documents have been received and (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	4) ☐ Interview Summary	(PTO 413)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date3  5) Notice of Informal Patent Application (PTO-152)  6) Other:						

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Claims 1-22 are pending.

#### Election/Restrictions

Applicant's election with traverse of Group I, i.e., claims 1-5, 7-18, in Paper No. 6 is acknowledged. The traversal is on the ground(s) that "the invention recited by claims 1-5 and 7-22 and the invention recited by claim 6 are not independent and distinct as required by 35 U.S.C §121." This is not found persuasive because as set forth in the restriction requirement, the product as claimed can be made by another and materially different process such as one that does not require at least sputtering first and second seed layers. It is noted that the so called "method" of claim 4 does not recite any actual processing steps, as does claim 6. The terms used in claim 4, e.g., "providing", "forming", do not patentably distinguish from the product as recited in claim 15.

The requirement is still deemed proper and is therefore made FINAL.

2. Claim 6 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

4. Claims 1-2, 4-5, 13-15, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ainslie et al (US 4,761,699). (As per claims 1, 4 and 15) Ainslie et al discloses a slider assembly and bonding method, as shown in at least FIGs. 4-7, including: a slider 16 having a leading edge

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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and trailing edge 26, the trailing edge having a forward face; a flex on suspension (FOS) bond pad 47; a slider bond pad 41; means for positioning the slider on the flex circuit material of the gimbal 40 such that the slider bond pad is aligned with the FOS bond pad which includes a notch (unnumbered) adjacent the forward face of the slider and an "extended" bond pad 41 which is aligned with the FOS bond pad (see col. 7, lines 13-15) wherein the means is considered to facilitate a "tolerance buffer." (As per claim 5) The slider is considered to be positioned on a suspension 40, which encompasses a gimbal (flexure) and a load beam, as is typically known in the art (see col. 2, lines 38-47); (as per claims 13-14 & 18-19) wherein there is a gap between the extended bond pad 41 and the FOS pad (see FIG. 7) and a ball bonding (82, 84) method is used to attach the slider to the flex circuit material.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 7-12, 16, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ainslie et al. For a description of Ainslie et al, see the rejection, supra. (As per claims 7-9 & 20-

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22) Ainslie et al remains silent as to the actual process of forming the notch, i.e., slicing with a grinding wheel; cutting using a laser, or etching with a wafer etch process, however, it is considered that as all of these methods were well known, any one of which would have been readily utilized by a skilled artisan to form the aforementioned notch in the slider. The motivation being that lacking any unobvious or unexpected results, the method for forming the notch (out of the three recited) would have been chosen through routine engineering experimentation, as they were all conventionally known.

Further, with respect to the dimensional parameters of the notch/bond pad (re claims 10-12), it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided such dimensions in the course of routine engineering optimization/experimentation. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claims 9-12 is considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir.

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1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

With respect to claim 16, although pad 41 does not set forth a gold pad mounted thereto, at least from the disclosure of Ainslie et al (see col. 6, lines 32-36) which states that gold may be formed over pads 74, it would have also been obvious to have provided such over the extended pad 41. The motivation would have been: gold is known to be a very good conductor and contain corrosion-resistant properties, as known by skilled artisans in this art.

### Allowable Subject Matter

8. Claims 3, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (703) 308-2850. The examiner can normally be reached on M-TH 7:15am-4:45pm (and every other friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian E. Miller Primary Examiner

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March 31, 2004